

Intermediate Graphic Communications

Levels: Grades 10-12
Units of Credit: 0.5
CIP Code: 10.0302
Prerequisite: Introduction to Graphic Communications

COURSE DESCRIPTION

CORE STANDARDS, OBJECTIVES, AND INDICATORS

STANDARD 100302-01 **Students will be able to understand the introduction to the graphics/printing industry.**

OBJECTIVES

100302-0101 Define the role of graphics in the free enterprise system.
100302-0102 Identify print markets and types of print businesses.
100302-0103 Identify and describe the major printing process and products produced by each.
100302-0104 List in order the technical production flow from idea to finished product.
100302-0105 Identify and describe basic printing equipment.

STANDARD 100302-02 **The student will be able to understand and demonstrate safe practices.**

OBJECTIVES

100302-0201 List safety rules involving flammable liquids.
100302-0202 List the steps to be taken in case of injury in the lab.
100302-0203 Identify location(s) of first aid kit(s).
100302-0204 Identify location(s) of eye wash station(s).
100302-0205 Identify where protective safety equipment is needed.
100302-0206 Follow proper safety procedures when operating equipment.
100302-0207 Follow approved shop dress code for safe operation.
100302-0208 Pass general lab safety test.
100302-0209 Read, comprehend and follow instructions on warning labels.
100302-0210 Demonstrate common sense when working with others.

STANDARD 100302-03 **The students will be able to understand and demonstrate measurement systems.**

OBJECTIVES

100302-0301 Measure linear dimensions in inches.
100302-0302 Measure linear dimensions in fractions of inches.
100302-0303 Measure linear dimensions in millimeters.
100302-0304 Measure type in points.

STANDARD **The student will be able to understand and demonstrate**
100302-04 **basic math skills.**

OBJECTIVES

100302-0401	Solve addition of whole number problems.
100302-0402	Solve addition of fraction problems.
100302-0403	Solve addition of decimal problems.
100302-0404	Solve subtraction of whole number problems.
100302-0405	Solve subtraction of fraction problems.
100302-0406	Solve subtraction of decimal problems.
100302-0407	Solve multiplication of whole number problems.
100302-0408	Solve multiplication of fraction problems.
100302-0409	Solve multiplication of decimal problems.
100302-0410	Solve division of whole number problems.
100302-0411	Solve division of fraction problems.
100302-0412	Solve division of decimal problems.
100302-0413	Solve fraction-to-decimal conversion problems.
100302-0414	Solve decimal-to-fraction conversion problems.
100302-0415	Solve decimal-to-percent conversion problems.
100302-0416	Solve basic linear measure problems.
100302-0417	Solve basic paper cutting calculations.
100302-0418	Solve inches to points conversion problems.
100302-0419	Solve points to inches conversion problems.
100302-0420	Solve cost calculating problems.

STANDARD **Students will be able to understand and demonstrate**
100302-05 **design and layout.**

OBJECTIVES

100302-0501	Identify the basic fundamentals of type.
100302-0502	Identify appropriate uses of type.
100302-0503	Identify the basic elements of design.
100302-0504	Identify appropriate uses of the basic elements of design.
100302-0505	Identify the basic principles of design.
100302-0506	Identify appropriate uses of the basic principles of design.
100302-0507	Identify the basic layout elements.
100302-0508	Identify appropriate uses of the basic layout elements.
100302-0509	Produce thumbnails, rough, and final layouts.
100302-0510	Correctly use the basic fundamentals of type in a final layout.

STANDARD **The student will be able to understand and demonstrate**
100302-06 **Digital Image Preparation.**

OBJECTIVES

100302-0601	Identify various desktop publishing applications and uses.
100302-0602	Demonstrate keyboard typing skills.

100302-0603	Design a page with appropriate margins, formatting, guides, trims and folds.
100302-0604	Flow copy from word processing program to page layout program.
100302-0605	Define the difference between raster and vector.
100302-0606	Identify various types of storage media.
100302-0607	Import an image into a page layout program.
100302-0608	Identify between different file formats and there uses.
100302-0609	Identify the difference between continuous tone and halftone.
100302-0610	Create a multi-page layout in a page layout program.
100302-0611	Create process and spot colors in a page layout program.
100302-0612	Create or edit a vector image in a drawing program.
100302-0613	Edit a raster image in a paint program.
100302-0614	Output color separations from a page layout program.
100302-0615	Output a proper bleed from a page layout program.

STANDARD 100302-07 The students will be able to understand and demonstrate image capture.

OBJECTIVES

100302-0701	Identify basic scanning hardware
100302-0702	Identify basic digital camera hardware.
100302-0703	Explain the difference between line art and continuous tone originals.
100302-0704	Use a digital camera or a scanner to capture a digital image.
100302-0705	Determine the appropriate DPI for scanning line art & continuous tone originals.

STANDARD 100302-08 The students will be able to understand and demonstrate digital file output.

OBJECTIVES

100302-0801	Define trapping.
100302-0802	Explain the purpose of a folding dummy.
100302-0803	Define imposition and signatures.
100302-0804	Identify image and non-image areas on a offset printing plate.
100302-0805	Produce an analog or digital plate for offset printing.

STANDARD 100302-09 The students will be able to understand and demonstrate press operations.

OBJECTIVES

100302-0901	Identify offset press parts and systems.
100302-0902	Identify the cylinders of an offset press.
100302-0903	Identify safety and operation procedures for printing on an offset press.

- 100302-0904 Perform setup for a print job.
100302-0905 Produce a job using an offset press.

STANDARD 100302-10 **The students will be able to understand and demonstrate binding and finishing techniques.**

OBJECTIVES

- 100301-1001 Identify basic paper types, and weights.
100301-1002 Identify grain direction of paper.
100301-1003 Draw a master cutting diagram for making cuts.
100301-1004 Identify operational and safety parts of the cutter.
100301-1005 Make accurate paper cuts using a mechanized paper cutter.
100301-1006 Define binding.
100301-1007 Identify different binding methods (adhesive, perfect, case, saddle, etc).
100301-1008 Identify padding equipment, tools, and materials.
100301-1009 Correctly produce a pad of paper.
100301-1010 Identify stapling and stitching equipment.
100302-1011 Define finishing.
100302-1012 Identify different finishing methods (perf, score, die cut, emboss).
100302-1013 Identify punching/drilling equipment, tools, and materials.
100302-1014 Explain the difference between cutting and trimming.
100302-1015 Demonstrate basic paper jogging techniques.

STANDARD 100302-11 **The students will be able to understand and demonstrate screen printing techniques.**

OBJECTIVES

- 100302-1101 Identify screen printing tools and equipment.
100302-1102 Identify squeegee characteristics. (durometer, shapes, etc.)
100302-1103 Properly prepare a screen.
100302-1104 Demonstrate proper screen printing techniques.
100302-1105 Define screen printing mesh counts.
100302-1106 Identify and compare direct and indirect stencils.
100302-1107 Properly reclaim a screen.
100302-1108 Identify screen printing stencil types and their uses.
100302-1109 Identify screen printing inks and applications.
100302-1110 Produce a multi-color screen print.

STANDARD 100302-12 **The students will be able to understand and demonstrate skills related to job application and interpersonal skills.**

OBJECTIVES

- 100302-1201 Demonstrate proper work ethics.

100302-1202	Demonstrate proper work habits.
100302-1203	Identify personal interests.
100302-1204	Work effectively as a team member.
100302-1205	Communicate effectively.

PROFESSIONAL DEVELOPMENT

STANDARD 100302-13	The students will be able to understand and demonstrate skills related to professional development.
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OBJECTIVES

100302-1301	Complete a personal inventory.
100302-1302	Set and meet goals.
100302-1303	Be self-motivated.
100302-1304	Know how to make decisions.
100302-1305	Know how to manage time.
100302-1306	Organize personal belongings and lab equipment.
100302-1307	Learn to communicate verbally.
100302-1308	Write effective communications.
100302-1309	Establish a personal reading program.
100302-1310	Develop effective work skills and attitudes.
100302-1311*	Master a working knowledge of SkillsUSA. <ul style="list-style-type: none"> ▪ State the SkillsUSA motto. ▪ State the SkillsUSA creed. ▪ Learn the SkillsUSA colors. ▪ Describe the official SkillsUSA dress. ▪ Describe the procedure for becoming a SkillsUSA officer.

STANDARD 100301-14	The students will be able to understand and demonstrate skills related to leadership.
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OBJECTIVES

100302-1401	Serve on a committee.
100302-1402	Prepare an agenda.
100302-1403	Assist in planning a meeting.
100302-1404	Review basic parliamentary procedure. <ul style="list-style-type: none"> ▪ Make a main motion.
100302-1405	Participate in a school project.
100302-1406	Attend a community meeting.
100302-1407	Practice effective speaking.
100302-1408	Present a three- to five-minute talk.
100302-1409	Implement a leadership project.
100302-1410*	Master a working knowledge of SkillsUSA. <ul style="list-style-type: none"> ▪ Describe the meaning of the SkillsUSA emblem. ▪ State the SkillsUSA pledge. ▪ Describe the duties of a SkillsUSA officer.

**STANDARD
100302-15**

The students will be able to understand and demonstrate skills related to career planning.

OBJECTIVES

- 100302-1501 Define your future occupation.
- 100302-1502 Survey employment opportunities.
- 100302-1503 Report on a trade journal article.
- 100302-1504 Explore opportunities for advanced training.
- 100302-1505 Conduct a worker interview.
- 100302-1506 Contact a professional association.
- 100302-1507 Explore entrepreneurship opportunities.
- 100302-1508 Give a talk about your career.
- 100302-1509 Review career goals.

**STANDARD
100302-16**

The students will be able to understand and demonstrate skills related to employment.

OBJECTIVES

- 100302-1601 Develop a list of work standards to follow at school and on the job.
- 100302-1602 Evaluate your personal ethics.
 - Evaluate your personal ethics against acceptable workplace ethics.
- 100302-1603 Build a job search network.
- 100302-1604 Find job leads.
- 100302-1605 Write a resume.
- 100302-1606 Create a job portfolio.
- 100302-1607 Complete a job application.
- 100302-1608 Write a business letter and memo.
- 100302-1609 Participate in an actual or simulated job interview.

* SkillsUSA PDP requirements - are recommended.